

AMENDMENTS TO THE CLAIMS

1.(currently amended): A network system comprising:

(a) a plurality of terminals which send and receive packets, each terminal belonging to one of a plurality of logical groups;

(b) a plurality of switches which interconnect said plurality of terminals by receiving and forwarding the packets originating from said terminals, each of said switches comprising:

first storage means for storing information that is used to identify logical group membership of the source terminal of a received packet,

query means for sending a query to request information about the logical group membership, when said first storage means has failed to provide sufficient information to identify the logical group membership of a particular source terminal, and

updating means for updating the information stored in said first storage means according to a response to the query sent by said query means; and

(c) a server which controls ~~control~~ said plurality of switches, comprising:

second storage means for storing a list of identifiers of the terminals, in association with the logical groups to which the terminals belong,

searching means for searching said second storage means in response to the query from said requesting switch,

transmission means for receiving a search result from said searching means and sending the search result to said requesting switch, [[and]]

supposition means for suggesting a specific logical group to which said source terminal in question is supposed to belong, based on the identifier of the source terminal, when said searching means has failed to provide the requested information; and

third storage means for storing a list of the switches being available in the

network system, in association with a list of the logical groups that can be assigned to the terminals belonging to each switch's local terminal group,

wherein, when the query is received from said requesting switch, said server consults said third storage means to find logical groups relevant to said requesting switch, and if the relevant logical groups do not include the logical group to which said source terminal in question is supposed to belong, prevents enrollment of said source terminal in the non-included logical group.

2.(original): The network system according to claim 1, wherein said transmission means sends the search result to other switches in addition to said requesting switch.

3.(cancelled)

4.(currently amended): The network system according to claim [[3]] 1, wherein said server further comprises logical group producing means for producing a new logical group when said supposition means has failed to suggest any specific logical group for said source terminal in question.

5. (Cancelled)

6.(currently amended): The network system according to claim [[5]] 1, wherein said server further comprises notification means for so notifying an administrator if said requesting switch is not included in the list of the available switches.

7.(currently amended): The network system according to claim [[5]] 1, wherein said server further comprises registration means for adding an entry for said requesting switch to

said third storage means, when the list of the available switches does not include said requesting switch.

8.(Cancelled):

9.(currently amended): A server for use in a network system, which controls a plurality of switches that interconnect a plurality of terminals by receiving and forwarding packets originating from the terminals, the server comprising:

storage means for storing a list of identifiers of the terminals, in association with logical groups to which the terminals belong;

searching means for searching said storage means in response to a query from one of the switches; [[and]]

transmission means for receiving a search result from said searching means and sending the search result to the switch that has sent the query;[[, and]]

supposition means for suggesting a specific logical group to which said source terminal in question is supposed to belong, based on the identifier of the source terminal, when said searching means has failed to provide the requested information; and

third storage means for storing a list of the switches being available in the network system, in association with a list of the logical groups that can be assigned to the terminals belonging to each switch's local terminal group.

wherein, when the query is received from said requesting switch, said server consults said third storage means to find logical groups relevant to said requesting switch, and if the relevant logical groups do not include the logical group to which said source terminal in question is supposed to belong, prevents enrollment of said source terminal in the non-included logical group.

10.(currently amended): A computer-readable medium which stores a computer program being designed to run on a computer in order to cause the computer to function as a server comprising:

storage means for storing a list of identifiers of terminals, in association with logical groups to which the terminals belong;

searching means for searching said storage means in response to a query from one of the switches; [[and]]

transmission means for receiving a search result from said searching means and sending the search result to the switch that has sent the query; [[,and]]

supposition means for suggesting a specific logical group to which said source terminal in question is supposed to belong, based on the identifier of the source terminal, when said searching means has failed to provide the requested information; and

third storage means for storing a list of the switches being available in the network system, in association with a list of the logical groups that can be assigned to the terminals belonging to each switch's local terminal group;

wherein, when the query is received from the requesting switch, the server consults said third storage means to find logical groups relevant to the requesting switch, and if the relevant logical groups do not include the logical group to which said source terminal in question is supposed to belong, prevents enrollment of said source terminal in the non-included logical group.